

Application No.: 09/609,813

Docket No. M4065.0051/P051-A

Replacement Claims

48. (Amended) A method of forming a circuit for storing information as one of at least two possible stable current states, the method comprising the following steps:

providing a semiconductor substrate;

providing doped silicon regions to form a multi-region planar thyristor having at least four regions;

forming at least one polysilicon gate overlying a unique junction of said multi-region planar thyristor thereby making said unique junction a gated diode; and

connecting said at least one polysilicon gate to a voltage source for producing latch-up in said multi-region planar thyristor.

51. (Amended) The method of claim 49 wherein said step of providing doped silicon regions further comprises forming an n-p-n-p-n-p-n planar thyristor.